

FIG. 1

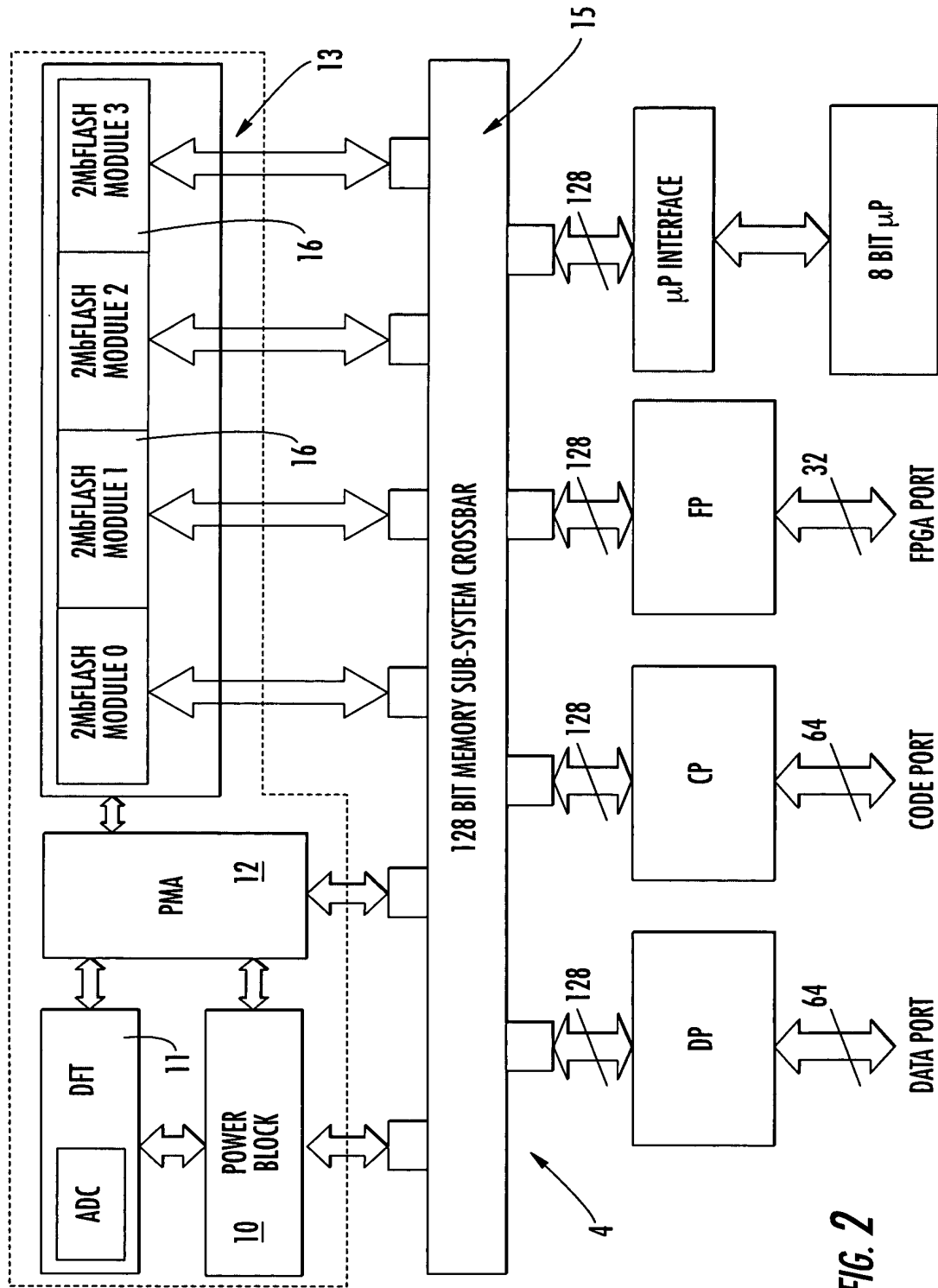


FIG. 2

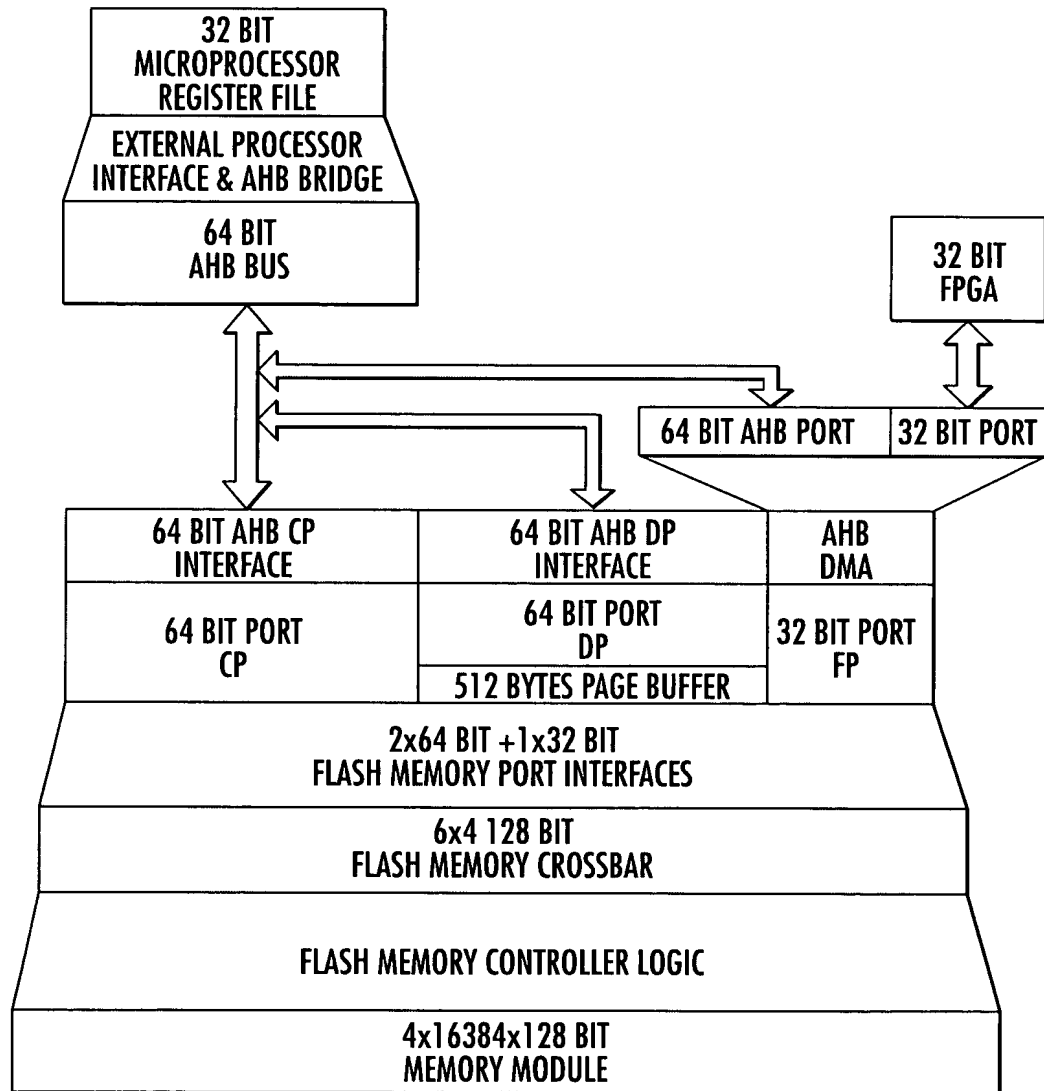
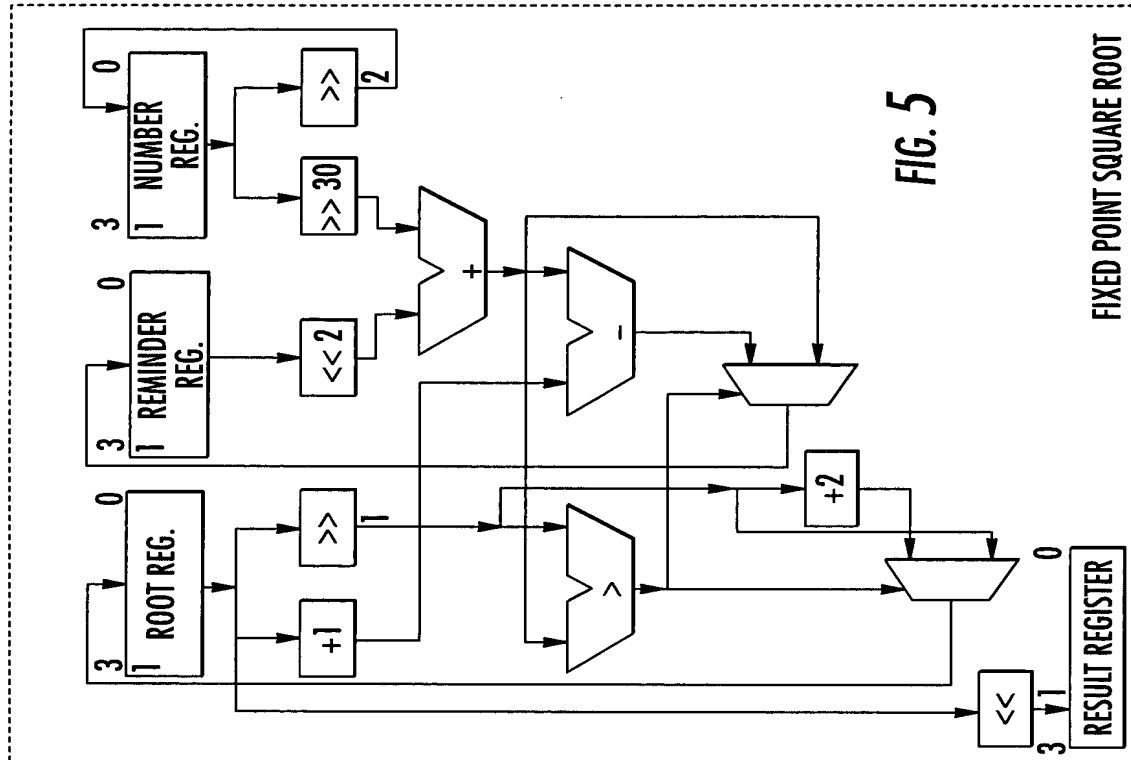
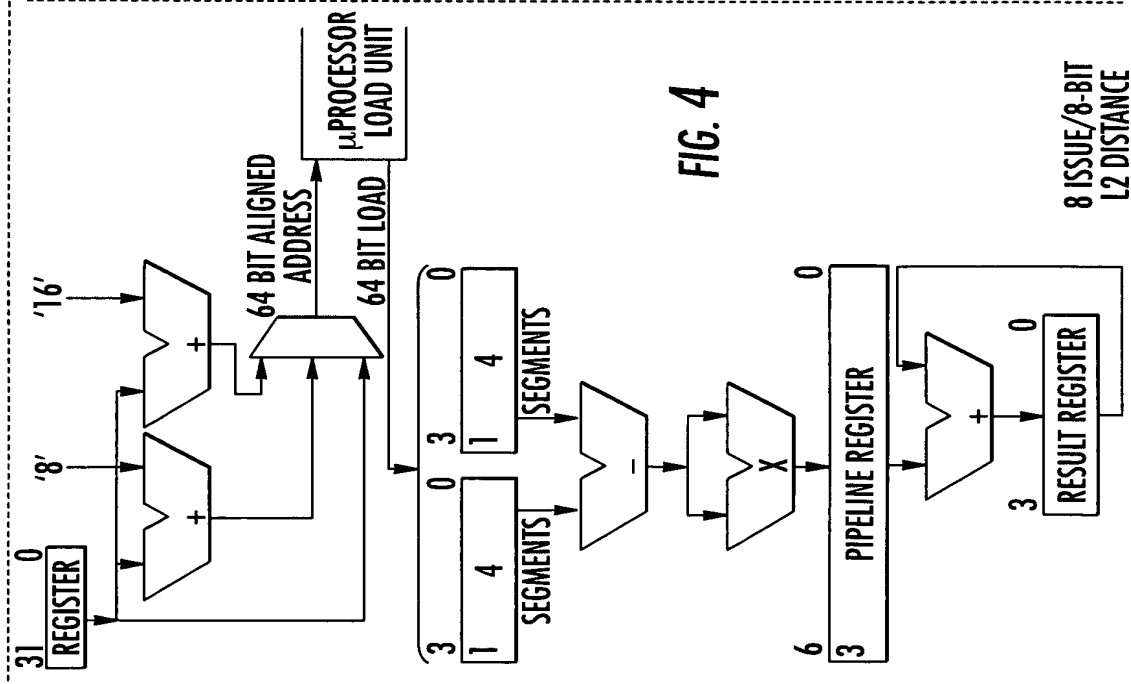
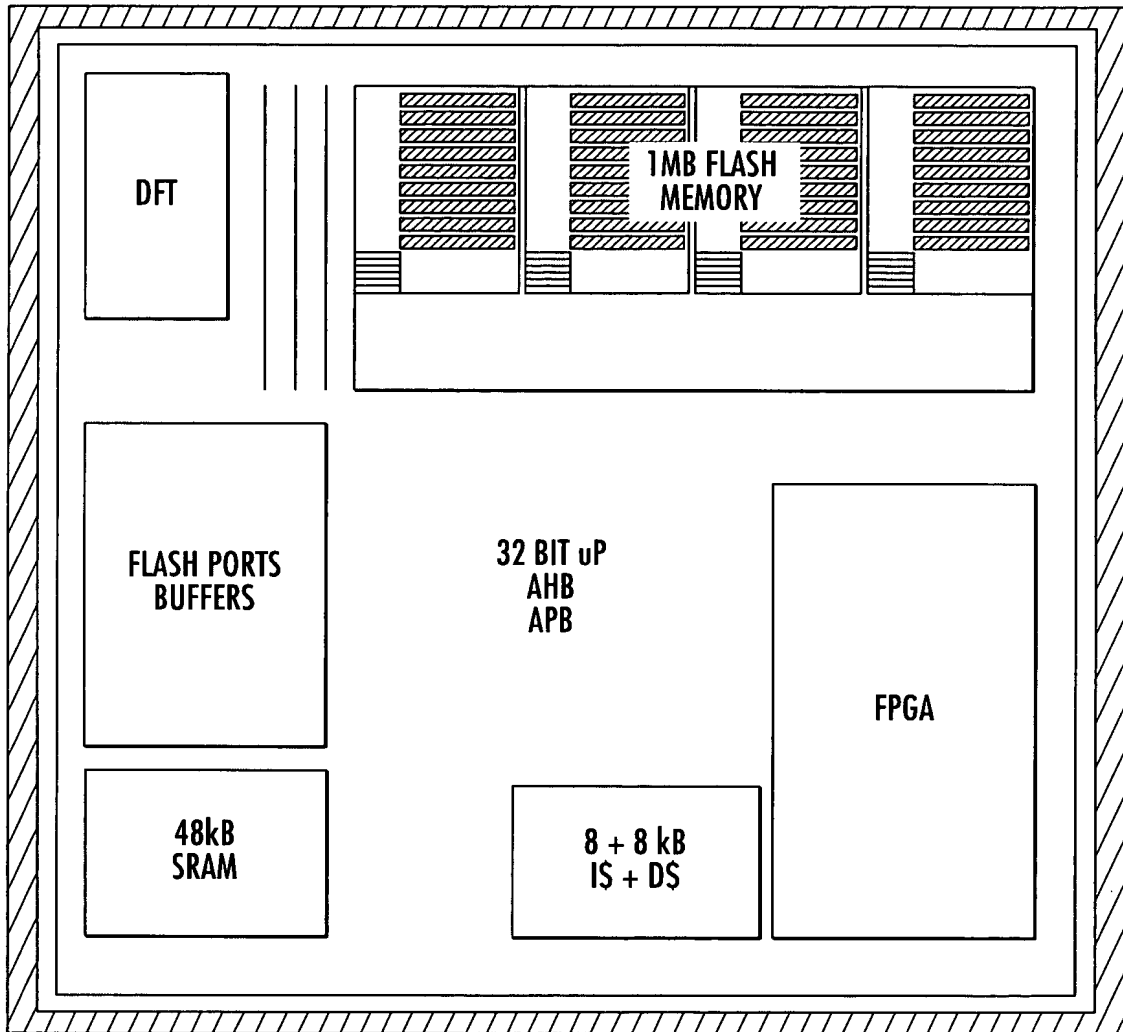


FIG. 3



ALGORITHM STAGE	RISC WITH BASIC DSP INSTRUCTION SUPPORT	RISC WITH MICROPROCESSOR EXTENSIONS	SPEED UP	ENERGY GAIN	ENERGY EFFICIENCY GAIN (ENERGY x DELAY)
BAYER FILTER	58 MSEC	24.7 MSEC	x2.3	x1.4	x3.22
EDGE DETECTION	4.5 MSEC	2.5 MSEC	x1.8	x0.95	x1.71
FACE DETECTION	1.5 SEC	382 MSEC	x4	x2.9	x11.6
FACE RECOGNITION (TWENTY FACE DATABASE)	9.15 SEC	860 MSEC	x10.6	x9	x95.4
TOTALS	10.7 SEC	1.26 SEC	x8.5	x6.7	

FIG. 6



**FIG. 7**